AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0001] with the following amended paragraph:

[0001] This application is a divisional of United States Patent Application Serial Number 09/447,303 filed November 23, 1999, which is a ~~continuation of~~ National Stage Entry of PCT/CA98/00522 filed May 26, 1988 designating the United States ~~and claiming.~~ PCT/CA98/00522 claims priority of United States provisional Patent Application Serial Number 60/047,795 filed May 30, 1997.

Please replace Table 1 found on pages 14 and 15 of the specification with the following amended Table 1:

Table 1

Genetic constructs and corresponding phenotypes of transgenic plants

Construct[1]	Introduced into	KanR plants recovered	Confirmed transgenic[2]	Phenotype(s) of confirmed transgenic plants
~~AP3/C4-ORF~~[3] AP3/C4-ORF	fertile Westar (*nap*)	17	12	Variable male sterility ranging from near complete sterility (2 plants) to complete fertility (most plants); some plants show alterations in floral organ number, morphology & identity
AP3/A9-ORF	"	21	7	Variable male sterility ranging from near complete sterility (1 plant) to complete fertility (most plants); some plants show alterations in floral organ number, morphology & identity
AP3/A9-A6e	male sterile Westar (*pol*)	9	7	All plants partially male fertile; stamen and petal size intermediate between fertile Westar (*nap*) and Westar (*pol*) CMS plants
AP3/A9-A6u	fertile Westar (*nap*)	20	9	Most plants male fertile with some flowers partially sterile; some plants display reduced stamens; pale yellow petals; changes in whorl identity and/or organ number.
mas2'/A9-A6e	male sterile Westar (*pol*)	22	16	Most plants partially male fertile; stamen and petal size intermediate between fertile Westar (*nap*) and Westar (*pol*) CMS plants; some plants show changes in floral whorl identity; elongated inflorescence and vegetative internodes.
AP3/GUS	Westar (*nap*)	13	9	Identical to Westar (*nap*); GUS expression observed at base of petals and stamens, as expected

[1]Construct elements presented in sequence: promoter/presequence-coding sequence; AP3, *Arabidopsis APETELA3* promoter; C4, yeast COX4 presequence; A9, Neurospora ATP9

presequence; ORF, edited *orf224* coding sequence; A6e, edited *atp6* coding sequence, A6u, unedited *atp6* coding sequence.

[2]Confirmed by Southern blot analysis using a probe derived from the NPTII gene.

~~[3]Epitope-tagged edited atp6 coding sequence fused to the A9 presequence.~~

~~[4]Edited atp6 coding sequence, no targeting presequence.~~

Please replace paragraph [0048] with the following amended paragraph:

[0048] The observation of similar types of sterility modifications in multiple independently transformed plants provides very strong support for our initial hypotheses, namely: (i) that constructs which allow targeting of the ORF224 or unedited ATP6 polypeptides to the mitochondria can confer sterility on male fertile plants and hence serve as synthetic maintainer genes; and (ii) that constructs which allow targeting of the edited ATP6 polypeptide to the mitochondria can serve as synthetic restorer genes. The data also indicate that do avoid deleterious effects on vegetative growth and female fertility, it is necessary to express these constructs using a tissue specific or inducible promoter. The analysis of the R1 progeny of the RO plant (a plant recovered from the transformation - regeneration protocol) [[C4-ORF]] A9-ORF expressing plant 40-8 (see above) has provided compelling evidence that the phenotypes observed are inheritable and due to the transgene. We raised 20 of these plants to maturity. A range of floral phenotypes were evident, from the extreme abnormalities of the parental plant, where only two very sterile anthers form and the remaining four anthers are converted to pistil-like organs, to the partial male fertility observed in many of the RO plants that express this construct. All the R1 progeny plants contained the transgene, suggesting that the original 40-8 RO plant may have had more than one copy of the gene. This would further indicate that the degree of sterility expressed is dependent on gene dosage. This gene dosage effect provides an additional means of modifying the degree of sterility expressed by the transgenic plants.

Please replace paragraph [0055] with the following amended paragraph:

[0055] Although we have described a method for enhancing the sterility of a pol CMS plant using the AP3/C4-ORF construct, the [[AP3/A9-A6a]] AP3/A9-A6u and AP3/A9-A6ep

constructs could also be used for this purpose, as the expression of all these constructs result in completely male sterile pol CMS transgenic plants.